

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A compact and portable hypoxic gas delivery apparatus by producing from ambient air a product gas having ~~[[a]]~~ lower levels of oxygen concentration and delivering the product gas to a user of the apparatus, the apparatus comprising a pressure swing adsorption unit having at least one adsorber bed to receive ambient air and adsorb the nitrogen or the oxygen from the ambient air to produce both a nitrogen enriched gas and an oxygen enriched gas, and control means for delivering the nitrogen enriched gas in ~~pulse doses~~ a pulse dose to a user ~~at selectable rates during~~ for a selectable predetermined period of time and actuated upon initial inhalation by the user.
2. (Currently amended) The apparatus according to claim 1 and further comprising means for selectively ~~delivering either the nitrogen enriched gas or the oxygen enriched gas to the user in pulse doses~~ switching the pressure swing adsorption unit to deliver in the pulse dose to the user the oxygen enriched gas instead of the nitrogen enriched gas.
3. (Currently amended) The apparatus according to claim 1 in which the pressure swing adsorption unit comprises two adsorber beds alternately producing the enriched gases, and further comprising valve means for controlling the flow of air and gases ~~substantially in the sequence as illustrated in FIG. 2~~ alternately through the beds.
4. (Original) The apparatus according to claim 1 and further comprising means for adjusting the enrichment of the nitrogen in the nitrogen enriched gas to simulate various geographic altitudes.
5. (Currently amended) The apparatus according to claim 1 in which the control means ~~actuates~~ actuating the flow of delivered gas upon initial inhalation ~~[[and]]~~ further comprises means for increasing or decreasing the effective flow rate of ~~breathing~~ the nitrogen enriched gas by increasing or decreasing the activation time during each inhalation cycle.

6. (Original) The apparatus according to claim 1 and further comprising means for adjusting the enrichment of the nitrogen in the nitrogen enriched gas to produce selectively different concentrations of oxygen and nitrogen in the nitrogen enriched gas.
7. (Original) The apparatus according to claim 1 in which the pressure swing adsorption unit comprises three adsorber beds alternately producing the enriched gases.
8. (Currently amended) The apparatus according to claim 1 and further comprising means for powering the apparatus from any one of three sources including a rechargeable battery pack, an AC adapter for connection to an AC outlet, and a DC adapter for ~~[[a]]~~ connection to the power system of a vehicle.
9. (Original) A compact and portable hypoxic gas delivery apparatus by producing from ambient air a product gas having a lower levels of oxygen concentration and delivering the product gas to a user of the apparatus, the apparatus comprising a pressure swing adsorption unit having at least one adsorber bed to receive ambient air and adsorb the nitrogen or oxygen from the ambient air to produce both a nitrogen enriched gas and an oxygen enriched gas, and means for selectively delivering either the nitrogen enriched gas or the oxygen enriched gas to a user during inhalation by the user.
10. (Currently amended) The apparatus according to claim 9 and further comprising means control means for delivering the ~~nitrogen~~ selected enriched gas in pulse doses to the user at selectable rates ~~during~~ and actuated upon initial inhalation by the user.
11. (Currently amended) The apparatus according to claim 10 in which the control means ~~actuates~~ actuates actuating the flow of delivered gas upon initial inhalation ~~[[and]]~~ further comprises means for increasing or decreasing the effective flow rate of ~~breathing~~ the ~~nitrogen~~ selected enriched gas by increasing or decreasing the activation time during each inhalation cycle.
12. (Currently amended) The apparatus according to claim 9 in which the pressure swing adsorption unit comprises two adsorber beds alternately producing the enriched gases, and further comprising valve means for controlling the flow of air and gases ~~substantially in the sequence as illustrated in FIGS. 4 and 5~~ alternately through the beds.

13. (Original) The apparatus according to claim 9 and further comprising means for adjusting the enrichment of the nitrogen in the nitrogen enriched gas to simulate various geographic altitudes.

14. (Original) The apparatus according to claim 9 and further comprising means for adjusting the enrichment of the nitrogen in the nitrogen enriched gas to produce selectively different concentrations of oxygen and nitrogen in the nitrogen enriched gas.

15. (Original) The apparatus according to claim 9 in which the pressure swing adsorption unit comprises three adsorber beds alternately producing the enriched gases.